## **ABSTRACT**

A wind power generation system 10 comprising a frame, an impeller 12 rotatably supported by the frame, plural permanent magnets 31 aligned at equal intervals from the rotation center, and coils 32 aligned annularly on the frame. The relative motion of the permanent magnets 31 and the coils 32 in close vicinity generates electric powers by the inverse action of a linear motor. The coils 32 are mounted on the ring provided on the frame, and the permanent magnets 31 are provided on the lower end of the longitudinal blades 26 of the impeller.